

UNIVERSAL LOAD ADDRESS/VALUE PREDICTION SCHEME

Abstract of the Disclosure

This invention is a method and system for hybride prediction of load addresses and/or values. The new scheme for value prediction allows to predict last values, strides as well as values out of context without the use of a sophisticated switching scheme between several predictors. The system collects patterns of deltas of subsequent values instead of the values itself in a first table (40). Thus, a last value prediction can be achieved by predicting a 'pattern' of just one stride which is zero. A stride predictor uses a pattern of one constant stride. And a certain pattern of values is modelled by recording the pattern of deltas between the values and adding the deltas to the last value. The switching scheme inherently includes the system itself and operates basically by immediate evaluation of counters in the pattern history table (44). (Fig. 4)